



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/789,771

02/27/2004

Naoko Ikcgaya

16869P-107800US

1911

20350

7590

05/01/2006

EXAMINER

LE, MICHAEL

TOWNSEND AND TOWNSEND AND CREW, LLP

TWO EMBARCADERO CENTER

EIGHTH FLOOR

SAN FRANCISCO, CA 94111-3834

ART UNIT

PAPER NUMBER

2163

DATE MAILED: 05/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/789,771	Applicant(s) IKEGAYA ET AL.	
	Examiner Michael Le	Art Unit 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary and Status of Claims

1. This Office Action is in response to Applicant's reply filed February 13, 2006.
2. Claims 1-13 are pending.
3. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph.
4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek et al. (US Patent 6,108,748) of record, in view of Wilde (US Patent 5,991,753).
5. Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek et al. (US Patent 6,108,748) of record, in view of Wilde (US Patent 5,991,753), further in view of Mogi et al. (US Patent Pub 2003/0093439) of record.
6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. **Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph**, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
9. **Claim 1** recites "an unnecessary file table having information between each of a plurality of migration source storage devices and none or at least one file corresponding to one of the migration source storage devices and not to be migrated to any one of a plurality of migration

Art Unit: 2163

destination storage device” in lines 11-14 and “a necessary migration table having information between each of the plurality of migration destination storage devices and none or at least one file corresponding to one of the migration destination storage devices and needing to be migrated to at least one of the migration destination storage devices” in lines 15-19. The language of the limitations is unclear and confusing. Specifically the phrase “having information between each of a plurality of ... storage devices and none or at least one file” in both limitations. **Claims 9 and 12** recite similar limitations. For the prior art rejections below, the Examiner interprets the limitations to mean having a file table that has a list of files that are not to be migrated and a file table having a list of files that need to be migrated, respectively.

10. **Claims 2-8, 10, 11 and 13** are rejected because they depend on a rejected claim.

Dependent claims contain the limitations of the parent claims and are therefore rejected for the same reasons.

11. The prior art rejections to claims 1-13 below are made as best understood in light of the rejection under 35 U.S.C. 112, second paragraph addressed above.

Claim Rejections - 35 USC § 103

12. **Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek et al. (US Patent 6,108,748) provided by Applicant in the Information Disclosure Statement, hereinafter “Ofek”, in view of Wilde (US Patent 5,991,753).**

13. In regards to **claim 1**, Ofek discloses a data migration system comprising:

- a. a computer (Ofek: Fig. 5, element 12);
- b. a storage device connected to said computer (Ofek: Fig. 5, element 14);

Art Unit: 2163

- c. means for determining whether a file, that is to be migrated, has already been migrated to another storage device (Ofek: col. 7, lines 12-17, 22-55).
- d. a necessary migration table having information between each of the plurality of migration destination storage devices and none or at least one file corresponding to one of the migration destination storage devices and needing to be migrated to at least one of the migration destination storage devices (Ofek: Fig. 2; col. 8, lines 8-17)¹;
- e. a computer checking all the files of one of the migration source storage devices to determine whether each of the files of the one migration source storage device is an already migrated file which has been migrated to the at least one migration destination storage device (Ofek: col. 11, lines 41-47); and
- f. wherein the computer detaches the one migration source storage device from the computer system if all the files of the one migration source storage device are have been migrated after said checking (Ofek: col. 12, lines 58-67).

14. Ofek does not expressly disclose means for registering identification information about an unnecessary file to identify one or more unnecessary files, means for determining whether a file stored on said storage device is one of said unnecessary files and an unnecessary file table having information between each of a plurality of migration source storage devices and none or at least one file corresponding to one of the migration source storage devices and not to be migrated to any one of the plurality of migration destination storage devices.

15. Wilde discloses a list, called a lock list, maintained by a system administrator (register identification information about an unnecessary file) and is used to specify files that should be

¹ The data map/table is a list of data that needs to be migrated.

Art Unit: 2163

excluded from migration (determine whether file is one of said unnecessary files) (Wilde: col. 14, lines 31-34).

16. Ofek and Wilde are analogous art because they are from the same field of endeavor of data migration.

17. At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the system of Ofek by adding means for registering identification information about an unnecessary file to identify one or more unnecessary files, means for determining whether a file stored on said storage device is one of said unnecessary files and an unnecessary file table having information between each of a plurality of migration source storage devices and none or at least one file corresponding to one of the migration source storage devices and not to be migrated to any one of the plurality of migration destination storage devices, as taught by Wilde.

18. The motivation for doing so would have been because allowing a system administrator to maintain a list of files not to be migrated (unnecessary files), it allows for performing flexible migration and saves time and processing because only necessary files are migrated and unnecessary files are not (Wilde: col. 13, lines 57-67; col. 14, lines 1-4).

19. In regards to **claim 2**, Ofek discloses said storage device can be removed depending on results from said first and second determining (Ofek: col. 12, lines 58-67).

20. In regards to **claim 3**, Ofek discloses a data element map/table that stores information about particular data elements, that includes a flag indicating whether or not the data element is presently stored in the second data storage system (said another storage device) (Ofek: col. 8,

Art Unit: 2163

lines 25-53). Ofek further discloses that said map/table is used to determine whether or not a particular track has already been migrated to the second system or not (determine whether file migration of a file to said another storage device is to be performed) (Ofek: col. 8, lines 54-57).

21. In regards to **claim 4**, Ofek discloses wherein whether or not a file stored on said storage device is migrated to said another storage device is determined by determining whether said file is duplicated on said another storage device (Ofek: col. 8, lines 54-57).

22. In regards to **claim 5**, Ofek discloses wherein said another storage device comprises a storage medium that is removable (Ofek: col. 6, lines 26-39)².

23. **Claims 6-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek et al. (US Patent 6,108,748) provided by Applicant in the Information Disclosure Statement, hereinafter “Ofek”, in view of Wilde (US Patent 5,991,753), further in view of Mogi et al. (US Patent Pub 2003/0093439) provided by Applicant in the Information Disclosure Statement, hereinafter “Mogi”.**

24. In regards **claim 6**, Ofek and Wilde disclose the limitations of parent claim 1 as addressed above. Ofek further discloses a second computer connected to said computer, to said storage device and to said another storage device wherein said second computer comprises said second means for determining (Ofek: Fig. 5, element 12A; col. 7, lines 12-17, 22-55). As addressed in the rejection to claim 1, Wilde discloses a list, called a lock list, maintained by a system administrator (register identification information about an unnecessary file) and is used to specify files that should be excluded from migration (determine whether file is one of said

² A disk drive is removable.

Art Unit: 2163

unnecessary files) (Wilde: col. 14, lines 31-34). Wilde further discloses detecting a file's attributes (collects information about a file to be stored) to determine whether the file is the original file or the transition file (Wilde: col. 6, lines 1-11). At the time of the invention, it would have been obvious for one of ordinary skill in the art to add means for registering and said first means for determining, taught by Wilde, to said second computer of Ofek.

25. The motivation for doing so would have been because allowing a system administrator to maintain a list of files not to be migrated (unnecessary files), it allows for performing flexible migration and saves time and processing because only necessary files are migrated and unnecessary files are not (Wilde: col. 13, lines 57-67; col. 14, lines 1-4).

26. Ofek and Wilde do not expressly disclose a means for displaying information to indicate that data migration is completed for said storage device. Ofek does disclose completion messages are generated when data migration has completed (Ofek: col. 19, lines 51-56).

27. Mogi discloses a display screen on an administrator terminal, which allows the administrator to view data migration plans (Mogi: Fig. 14; para. 0034; para. 0064, lines 9-11). Mogi further discloses a data position management program, which controls the data migration process that is displayed on the display of the administrator terminal (Mogi: para. 0110, lines 1-5) that also displays successful preparation of the data migration (Mogi: para. 0121, lines 1-7).

28. Ofek, Wilde and Mogi are analogous art because they are all directed towards the same field of endeavor of data migration.

29. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the combined system of Ofek and Wilde by adding to the second computer a means

Art Unit: 2163

for displaying information to indicate that data migration is completed for said storage device, as taught by Mogi.

30. The motivation for doing so would have been because it is desirable to allow an administrator to know when a data migration process has completed.

31. In regards to **claim 7**, Ofek discloses completion messages are generated when data migration has completed (Ofek: col. 19, lines 51-56) and determining if the file has been migrated to another storage device (Ofek: col. 8, lines 54-57). Determining if a file is one of said unnecessary files was addressed above in the rejection to claim 6, as disclosed by Wilde. Wilde discloses a list, called a lock list, maintained by a system administrator (register identification information about an unnecessary file) and is used to specify files that should be excluded from migration (determine whether file is one of said unnecessary files) (Wilde: col. 14, lines 31-34).

32. In regards to **claim 8**, the limitation was addressed above in the rejection to claim 6 as being disclosed by Wilde. Wilde discloses detecting a file's attributes (collects information about a file to be stored) to determine whether the file is the original file or the transition file (Wilde: col. 6, lines 1-11). Wilde further discloses a list, called a lock list, maintained by a system administrator (register identification information about an unnecessary file) and is used to specify files that should be excluded from migration (determine whether file is one of said unnecessary files) (Wilde: col. 14, lines 31-34). Ofek discloses determining whether or not a file stored on said storage device is migrated to said another storage (Ofek: col. 8, lines 54-57).

33. **Claim 9** is substantially similar to claims 1 and 6 in the form of a program for a computer system. Consequently, it is rejected for the same reasons.

Art Unit: 2163

34. In regards to **claim 10**, the programs have been addressed above in the rejection to claims 1 and 6 as being disclosed by Ofek and Wilde. Ofek discloses a migration completion judgment program (Ofek: col. 19, lines 51-56)³ and a removable device detection program (Ofek: col. 12, lines 43-67)⁴. Wilde discloses an unnecessary-file database operation program (Wilde: col. 13, lines 57-67; col. 14, lines 30-34)⁵.

35. In regards to **claim 11**, Ofek and Wilde do not expressly disclose displaying unnecessary file candidates and prompting a user to select an unnecessary file from said displayed unnecessary file candidates. Wilde does disclose a list, called a lock list, maintained by a system administrator (register identification information about an unnecessary file) and is used to specify files that should be excluded from migration (Wilde: col. 14, lines 31-34).

36. Mogi discloses a display screen on an administrator terminal, which allows the administrator to view data migration plans (Mogi: Fig. 14; para. 0034; para. 0064, lines 9-11). Mogi further discloses a data position management program, which controls the data migration process that is displayed on the display of the administrator terminal (Mogi: para. 0110, lines 1-5) that also displays successful preparation of the data migration (Mogi: para. 0121, lines 1-7).

37. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the combined system of Ofek and Wilde by adding the feature of displaying unnecessary file candidates and prompting a user to select an unnecessary file from said

³ Software determines when data migration has completed.

⁴ Storage devices can be connected and removed from the system and the system detects them in order to transfer data between them. Therefore the system has a removable device detection program.

⁵ The configuration file (database) is processed to determine data migration settings such as what files to exclude from migration (unnecessary files).

displayed unnecessary file candidates using the display of the administrator terminal taught by Mogi.

38. The motivation for doing so would have been because Mogi discloses a user interface on a display of the administrator terminal for preparation of data migration. Selecting files to exclude from data migration, as taught by Wilde, is part of the preparation and it would be more easily done if it were graphically performed with a graphical user interface.

39. In regards to **claim 12**, Ofek discloses a data migration support device connected via a network to a first computer system that includes a removable storage device and a second computer connected to said removable storage device (Ofek: Fig. 5, element 26 (data migration support device)), the device being a computer (Ofek: Fig. 5, element 26; col. 6, lines 9-13; a computer comprises a processor, controller, memory. It is connected to the network as seen in figure 5, therefore it has a communication device). Ofek further discloses determining whether a file has migrated to another storage device (Ofek: col. 8, lines 54-57). Ofek also discloses a necessary migration table having information between each of the plurality of migration destination storage devices and none or at least one file corresponding to one of the migration destination storage devices and needing to be migrated to at least one of the migration destination storage devices (Ofek: Fig. 2; col. 8, lines 8-17)⁶. Ofek discloses detaching said removable storage device from the computers if all the files of said removable storage device have been migrated (Ofek: col. 12, lines 58-67).

⁶ The data map/table is a list of data that needs to be migrated.

Art Unit: 2163

40. Ofek does not expressly disclose registering identification information about an unnecessary file with said memory to identify a plurality of registered unnecessary files and judging whether a file stored on the removable storage device is one of said registered unnecessary files.

41. Wilde discloses a list, called a lock list, maintained by a system administrator (register identification information about an unnecessary file) and is used to specify files that should be excluded from migration (determine whether file is one of said unnecessary files) (Wilde: col. 14, lines 31-34).

42. Ofek and Wilde are analogous art because they are from the same field of endeavor of data migration.

43. At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify the system of Ofek by adding the feature of registering identification information about an unnecessary file with said memory to identify a plurality of registered unnecessary files and judging whether a file stored on the removable storage device is one of said registered unnecessary files, as taught by Wilde.

44. The motivation for doing so would have been because allowing a system administrator to maintain a list of files not to be migrated (unnecessary files), it allows for performing flexible migration and saves time and processing because only necessary files are migrated and unnecessary files are not (Wilde: col. 13, lines 57-67; col. 14, lines 1-4).

45. Ofek and Wilde do not expressly disclose a display unit that displays information to indicate that data migration is completed for said removable storage device. Ofek does disclose

Art Unit: 2163

completion messages are generated when data migration has completed (Ofek: col. 19, lines 51-56).

46. Mogi discloses a display screen on an administrator terminal, which allows the administrator to view data migration plans (Mogi: Fig. 14; para. 0034; para. 0064, lines 9-11). Mogi further discloses a data position management program, which controls the data migration process that is displayed on the display of the administrator terminal (Mogi: para. 0110, lines 1-5) that also displays successful preparation of the data migration (Mogi: para. 0121, lines 1-7).

47. Ofek, Wilde and Mogi are analogous art because they are all directed towards the same field of endeavor of data migration.

48. At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the combined system of Ofek and Wilde by adding to the second computer a means for displaying information to indicate that data migration is completed for said storage device, as taught by Mogi.

49. The motivation for doing so would have been because it is desirable to allow an administrator to know when a data migration process has completed.

50. In regards to **claim 13**, the limitation was addressed above in the rejection to claim 12. Ofek discloses a data element map/table that stores information about particular data elements, that includes a flag indicating whether or not the data element is presently stored in the second data storage system (said another storage device) (Ofek: col. 8, lines 25-53) and said map/table is used to determine whether or not a particular track has already been migrated to the second system or not (determine whether file migration of a file to said another storage device is to be

Art Unit: 2163

performed) (Ofek: col. 8, lines 54-57). Wilde discloses a list, called a lock list, maintained by a system administrator (register identification information about an unnecessary file) and is used to specify files that should be excluded from migration (determine whether file is one of said unnecessary files) (Wilde: col. 14, lines 31-34).

51. In regards to the limitation wherein said controller loads said unnecessary-file information and said migration history into said memory via said communication device, Ofek discloses the system configuration device (data migration support device) that loads configuration information and the data map/table (migration history) (Ofek: col. 6, lines 5-13, 19-24).

Response to Amendment

Specification

52. Applicant's amendment to the abstract, title and specification is acknowledged. Consequently, objection to the specification is withdrawn.

Rejection of Claims 9-11 under 35 U.S.C 101

53. Applicant's amendment to claims 9-11 is acknowledged. Consequently, the rejection to claims 9-11 under 35 U.S.C. 101 is withdrawn.

Response to Arguments

Rejection of claims 1-13 under 35 U.S.C. 103(a)

54. Applicant's arguments in regards to the rejections to claims 1-13 under 35 U.S.C. 103(a), have been fully considered but they are not persuasive. Applicant seems to argue the claims as amended. Applicant alleges that Wilde (US Patent 5,991,753) fails to disclose an unnecessary file table as claimed (page 9, para. 4, lines 1-3 of the Remarks). The Examiner respectfully disagrees.

55. Wilde discloses a list, called a lock list, maintained by a system administrator (register identification information about an unnecessary file) and is used to specify files that should be excluded from migration (determine whether file is one of said unnecessary files) (Wilde: col. 14, lines 31-34). The unnecessary file table is essentially a list of files that are not to be migrated from the source storage device to the destination storage device. The lock list disclosed by Wilde is also a list of files that are not to be migrated from the source storage device to the destination storage device. The lock list not only includes the file names, but could include the path names of the files. Thus, Wilde discloses an unnecessary file table as claimed.

56. Ofek et al. (US Patent 6,108,748) hereinafter "Ofek", discloses the newly amended features as rejected above.

57. Consequently, the rejection to claims 1-13 under 35 U.S.C. 103(a) is maintained.

Conclusion

58. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

59. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

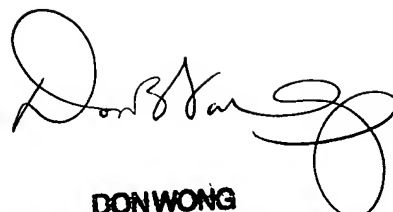
60. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Le whose telephone number is 571-272-7970. The examiner can normally be reached on Mon-Thurs : 9:30am-6pm, Fri: 8am-4:30pm.

61. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

62. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2163

Michael Le
Art Unit 2163
April 20, 2006

A handwritten signature in black ink, appearing to read "Don Wong", with a large, stylized loop at the end.

DON WONG
SUPERVISORY PATENT EXAMINER